

Work Order ID 163357

Tuesday, June 27, 2017 1:06:35 PM

163357

Page 1

Item ID: D412-704-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Co-Pilot's Emergency Cargo Release

Start Date: 6/27/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/5/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

DAS
21

Date: JUN 27 2017

Tooling:

Date:

Run Start ***NR1***

QC:

9-89

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

SEP 05 2017

SP

IIN-D412-704

E

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels per PPP D412-704-011 CHG003

DAS
27
9-89

SEP 15 2017

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

SEP 14 2017

DAS
28
9-89

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.03

Quality Control

DAS
27
9-89

SEP 15 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
10 25%								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

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163357

Page 2

Item ID: D412-704-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Co-Pilot's Emergency Cargo Release

Start Date: 6/27/2017 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 7/5/2017 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: _____	0.00							
130	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-704-011 Location : FG 018								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.10							
Quality Control									

DAS
28
9-89

SEP 15 2017

DAS
21
9-89

SEP 18 2017

SEP 18 2017

DAS
21
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

Picklist Print

Tuesday, June 27, 2017 1:06:38 PM

Page 1

Work Order ID: 163357

163357

Parent Item: D412-704-011

D412-704-011

Parent Item Name: Co-Pilot's Emergency Cargo Release

Start Date: 6/27/2017

Required Date: 7/5/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B05.01.28Hardware added to Step 3KJ/RF
IPP Rev:C05.12.21Hardware removed on Step 3 EC IPP REV:D AS
PER REV C JLM VERIFIED BY:EC
IPP REV:E 12.05.10 per ECN 12-583 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D412-704-041

Manufactured No

110

Each

3.0000

1

1

D412-704-041

Pedal Assembly

**

SEP 14 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST229B

1

162596

1

ST232aa

2

160490

2

D412-704-045

Manufactured No

110

Each

4.0000

1

1

D412-704-045

Cable Assembly

**

SEP 14 2017

Location

Loc Qty

Loc Code

ST215

4

160697

2

162558

2

D3207-5

Manufactured No

110

Each

8.0000

1

1

D3207-5

Bracket

**

SEP 14 2017

Location

Loc Qty

Loc Code

ST024

8

158164

2

162444

6

DAS
27
9-89

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification QA TS 202 QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

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Work Order ID: 163357

163357

Parent Item: D412-704-011

D412-704-011

Parent Item Name: Co-Pilot's Emergency Cargo Release

Start Date: 6/27/2017

Required Date: 7/5/2017

Start Qty: 1.00

Required Qty: 1.00

D3207-7

Manufactured No

110 Each

42.0000

1 1

D3207-7

Packer

DAS
27
9-89

Location

Loc Qty

Loc Code

ST024

42

145451

42

**

SEP 14 2017

DAS
28
9-89

D3207-11

Manufactured No

110 Each

2.0000

1 1

D3207-11

Bracket

DAS
27
9-89

Location

Loc Qty

Loc Code

ST024

2

143603

2

**

SEP 14 2017

DAS
28
9-89

D3208-1

Manufactured No

110 Each

15.0000

1 1

D3208-1

Doubler

DAS
27
9-89

Location

Loc Qty

Loc Code

ST025

15

155532

1

162424

14

**

SEP 14 2017

DAS
28
9-89

D3208-11

Manufactured No

110 Each

11.0000

1 1

D3208-11

Filler

DAS
27
9-89

Location

Loc Qty

Loc Code

ST026

11

162364

11

**

SEP 14 2017

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval 		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Tuesday, June 27, 2017 1:06:38 PM

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Work Order ID: 163357

163357

Parent Item: D412-704-011

D412-704-011

Parent Item Name: Co-Pilot's Emergency Cargo Release

Start Date: 6/27/2017

Required Date: 7/5/2017

Start Qty: 1.00

Required Qty: 1.00

D3208-3 Manufactured No

110 Each 11.0000 1 1

D3208-3

Pedal Mount Angle

**

SEP 14 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST025

11

155624

1

162491

10

D3208-7 Manufactured No

110 Each 4.0000 1 1

D3208-7

Filler

**

SEP 14 2017

DA
28
9-89

Location

Loc Qty

Loc Code

ST025

4

156267

4

D3208-9 Manufactured No

110 Each 4.0000 1 1

D3208-9

Doubler

**

SEP 14 2017

DA
28
9-89

Location

Loc Qty

Loc Code

ST025

4

155636

4

D3214-1 Manufactured No

110 Each 0.0000 1 1

D3214-1

Decal

**

SEP 14 2017

DA
28
9-89

MS21919-DG5 Purchased No

110 Each 38.0000 4 4

MS21919-DG5

Clamp

**

SEP 14 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST294

38

m137361

38

DAS
27
9-89

Tuesday, June 27, 2017 1:06:39 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

5.0 PARTS LIST

Qty -011	Qty -013	Qty -015	Qty -041	Qty -141	Qty -043	Qty -045	Part Number	Description
X							D412-704-011	COPILOT'S EMERGENCY CARGO RELEASE KIT (210/212/214)
	X						D205-704-013	COPILOT'S EMERGENCY CARGO RELEASE KIT (205)
		X					D412-704-015	COPILOT'S EMERGENCY CARGO RELEASE KIT (412)
1	1		X				D412-704-041	PEDAL ASSEMBLY (205/210/212/214)
		1		X			D412-704-141	PEDAL ASSEMBLY (412)
	1				X		D205-704-043	CABLE ASSEMBLY (205)
1		1				X	D412-704-045	CABLE ASSEMBLY (210/212/214/412)
			1	1			D3204-041	PEDAL ASSEMBLY (OR ECM 999702-1)
			1	1			D3205-1	PEDAL BRACKET (OR ECM 999703-1)
			1	1			D3205-3	BACK PLATE (OR ECM 999709-5)
			1	1			D3206-1	PEDAL ARM (OR ECM 999704-1)
		1					D3206-3	PEDAL ARM
	1						D3207-1	BRACKET
	1						D3207-3	BRACKET
1		1					D3207-5	BRACKET
1	1	1					D3207-7	PACKER
		1					D3207-9	BRACKET
1							D3207-11	BRACKET
1	1	1					D3208-1	DOUBLER (OR ECM 999709-1)
1	1	1					D3208-3	PEDAL MOUNT ANGLE (OR ECM 999709-7)
	1						D3208-5	MOUNT ANGLE
1	1	1					D3208-7	FILLER (OR ECM 999709-3)
1		1					D3208-9	DOUBLER
1		1					D3208-11	FILLER
			1	1			D3209-041	BRACKET ASSEMBLY (OR BHT 204-070-993-001)
1	1	1					D3214-1	PLACARD (OR ECM 999712-1)
					1		D3217-1	CABLE
						1	D3217-3	CABLE
					1	1	D3257-1	FITTING
					1	1	D3258-1	ANGLE BRACKET
		1					D4610-1	DOUBLER
		1					D4610-3	DOUBLER
			1	1			D4610-5	SHIM
		1					D4610-7	COVER
				1			D4611-1	BUSHING
		1					D4622-1	PLACARD
		1					D4622-3	PLACARD
			1	1	1	1	AN3-10A	BOLT
			1	1			AN315-4R	NUT
					1	1	AN3-5A	BOLT
			2	2			AN3-6A	BOLT
			1	1			AN4-10A	BOLT
			2				AN4-11A	BOLT
				2			AN4-12A	BOLT
			1				AN4-13A	BOLT
				1			MS20002-4	WASHER
				1			MS20004-24	BOLT

REFERENCE ONLY

DART AEROSPACE LTD.

IIN-D412-704

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Qty -011	Qty -013	Qty -015	Qty -041	Qty -141	Qty -043	Qty -045	Part Number	Description
			3	3	2	2	MS21042L3	NUT (OR MS21042-3)
			5	5			MS21042L4	NUT (OR MS21042-4)
4	4	4					MS21919DG5	CLAMP
			1				MS24694-S102	SCREW
				1			MS24694-S104	SCREW
	2						MS35489-10	GROMMET
		1					MS35489-149	GROMMET
			1	1			MS9519-10	BOLT
			4	4	2	2	NAS1149D0332J	WASHER (OR AN960JD10L)
			5	5	2	2	NAS1149D0363J	WASHER (OR AN960JD10)
			3	2			NAS1149D0416J	WASHER (OR AN960JD416L)
			14	13			NAS1149D0463J	WASHER (OR AN960JD416)
					3	3	NAS509-3	NUT

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Revision: E
Date: 16.05.05